

WHAT IS CLAIMED IS

1. A distillate fuel additive composition comprising an organometallic manganese compound, an alkyl-substituted succinimide ashless dispersant, and an overbased calcium sulfonate detergent.
2. The fuel additive of claim 1 wherein the organometallic manganese compound comprises methylcyclopentadienylmanganese tricarbonyl.
3. The fuel additive of claim 1 wherein the succinimide is prepared from polyisobutylene succinic anhydride and a polyalkylene polyamine.
4. The fuel additive of claim 1 wherein the succinimide is prepared from polyisobutylene succinic anhydride and tetraethylenepentamine.
5. The fuel additive of claim 1 wherein the polyisobutylene of the alkyl-substituted succinimide is prepared from about 850 to 2100 molecular weight polyisobutylene.
6. The fuel additive of claim 1 wherein the polyisobutylene of the alkyl-substituted succinimide is prepared from about 850 to 1300 molecular weight polyisobutylene.
7. The fuel additive of claim 1 wherein the polyisobutylene of the alkyl-substituted succinimide is prepared from about 950 molecular weight polyisobutylene.
8. The fuel additive of claim 1 wherein the composition comprises an organometallic complex of manganese, an overbased calcium sulfonate detergent, and an ashless alkyl-substituted succinimide dispersant such that when the additive composition is dissolved in a distillate fuel, the following relationship is satisfied:

$$-0.159x + 0.243y - 0.0143xy \leq -8.4$$

where

x = concentration of succinimide (in pounds per thousand barrels)

y = concentration of overbased calcium sulfonate (in PTB)

with the following limitations:

x = 20-35, and y = 10-120.

9. The fuel additive of claim 1 wherein the overbased calcium sulfonate has a TBN of above about 200.
10. The fuel additive of claim 1 wherein the overbased calcium sulfonate has a TBN of about 300.
11. A fuel comprising a major amount of a middle distillate fuel and a minor amount of a fuel additive composition comprising an organometallic manganese compound, an alkyl-substituted succinimide ashless dispersant, and an overbased calcium sulfonate detergent of TBN about 300.
12. A method for improving the cleanliness of a fuel intake systems by use in the fuel intake system of a fuel containing a distillate fuel additive composition comprising an organometallic manganese compound, an alkyl-substituted succinimide ashless dispersant, and an overbased calcium sulfonate detergent of TBN about 300.